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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,544	10/20/2003	Vasily I. Shveykin	DLED.004CP1C1	9320
20995	7590	07/01/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			TRAN, MINH LOAN	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/689,544

Applicant(s)

SHVEYKIN, VASILY I.

Examiner

Minh-Loan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 55 and 56 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 55 and 56 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/781,017.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/17/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The Preliminary Amendment filed on 06/17/2004 has been entered.

***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/781,017, filed on 02/09/2001.

***Information Disclosure Statement***

3. The information disclosure statement filed 06/17/2004 has been considered.

***Oath/Declaration***

4. The oath or declaration filed on 10/20/2003 is acceptable.

***Drawings***

5. The drawings filed on 10/20/2003 are acceptable.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 55 and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 55, lines 11 and 12, "reflectors that together form an optical resonator **at least part of which coincides with at least part of said radiation inflow region and at least part of said gain region**" is unclear as to whether it is being referred to the reflectors that together form an optical resonator at a part that coincides with at least part of said radiation inflow region and at least part of said gain region.

In claim 56, lines 12 and 13, "reflectors that together form an optical resonator **at least part of which coincides with at least part of said radiation inflow region and at least part of said gain region**" is unclear as to whether it is being referred to the reflectors that together form an optical resonator at a part that coincides with at least part of said radiation inflow region and at least part of said gain region.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 55 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Scifres et al. (4,063,189).

Figures 1, 1A, 5, 6, 9 of Scifres et al. disclose an injection laser comprising at least one gain region having a longitudinal gain axis and outputting laser radiation, the injection laser comprising a laser heterostructure (6,4,8) comprising an active layer 4 forming the at least one gain region; cladding layers 6, 8 on opposite sides of the active

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layer 4; the ohmic contacts 14, 16 for electrical connection to the heterostructure (6,4,8); at least one radiation inflow region 10 comprising at least one portion adjoining the laser heterostructure (6,4,8) that is transparent to the laser radiation, the radiation inflow region 10 being located on at least one side of the active layer 4 with the cladding layer 8 separating the active layer 4 from the radiation inflow region 10; reflectors 22, 24 (figure 6) that together form an optical resonator at a part of which coincides with at least part of the radiation inflow region 10 and at least part of the gain region such that lasing occurs in the radiation inflow region 10, wherein the laser heterostructure (6,4,8) and the adjoining radiation inflow region 10 together have an effective refractive index such that the refractive index of the radiation inflow region 10 exceeds the effective refractive index (lines 62-68 in column 3 of Scifres et al.); and light 18 (figure 1) leaks from the gain region into the radiation inflow region 10 for lasing therein.

### ***Conclusion***


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Loan T. Tran whose telephone number is (571) 272-1922. The examiner can normally be reached on Monday-Friday 9:00 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLT  
6/2005

  
Minh-Loan T. Tran  
Primary Examiner  
Art Unit 2826